DOCUMENT RESUME

ED 285 755 SE 048 343

AUTHOR Matsumoto, Katsunobu
TITLE Expected Style of In-Service Programs for Teachers: Objectives, Content, Methods, and Educational Innovations in Japan.
PUB DATE Sep 86
NOTE 8p.; Paper presented at the United States-Japan Seminar on Science Education sponsored by the National Science Foundation and the Japan Society for the Promotion of Science (Honolulu, HI, September 14-20, 1986).
PUB TYPE Reports - Descriptive (141) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Beginning Teachers; *Elementary School Science; Elementary Secondary Education; *Foreign Countries; *Inservice Teacher Education; *National Programs; Public Agencies; Science Education; Science Instruction; *Science Teachers; Science Teaching Centers; *Secondary School Science; Workshops
IDENTIFIERS *Japan

ABSTRACT

Most educators feel that it is important to provide novice teachers with in-service training at the beginning of their teaching careers, and to continue with such programs throughout their professional lives. With this in mind, this document outlines a proposed in-service teacher education program for Japan. The paper considers the creation of in-service education programs for beginning teachers, and suggests required attendance at certain in-service programs and a one year conditional period. The general situation of in-service education for science teachers in Japan is examined, and the roles of the Ministry of Education, the Science and Culture Prefectural Board of Education, for Japan. The paper considers the creation of in-service education programs for beginning teachers, and suggests required attendance at certain in-service programs and a one year conditional period. The general situation of in-service education and the Prefectural Education Centers are described. Additional information and recommendations are given about the involvement of science education centers in in-service education, the Hiroshima Prefectural Science Education Center, and courses sponsored by research organizations. (TW)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED285755

Expected Style of In-Service Programs for Teachers: Objectives, Content, Methods, and Educational Innovations in Japan

Katsunobu Matsumoto

Osaka University of Education

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

X Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Floyd E. Matthews

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Paper presented at the United States-Japan Seminar on Science Education (Honolulu, HI, September 14-20, 1986).

SE 048 943

EXPECTED STYLE OF IN-SERVICE PROGRAMS FOR TEACHERS: OBJECTIVES, CONTENT, METHODS, AND EDUCATIONAL INNOVATIONS IN JAPAN

Katsunobu Matsumoto
Osaka University of Education

I. Creation of In-Service Training Programs for Beginning Teachers

It is important to provide novice teachers with in-service training at the beginning of their teaching careers to help them make a successful start of their educational service. In order to help teachers in public schools develop the skills required for their profession as well as a firm sense of mission and broad grasp of knowledge, we should immediately consider concrete measures to introduce in-service training programs for beginning teachers based on the following:

a. All beginning teachers should be required to undergo one year of training immediately after their employment under the guidance of supervising teachers. The training should concern both actual teaching and other duties of teachers.

In administering training for beginning teachers, each school should establish a systematic mechanism whereby the supervising teachers and all other teachers at the school will cooperate in the training of beginning teachers under the leadership of the principal.

b. Specially appointed supervising teachers should be assigned to schools where beginning teachers have been placed. Further, every prefectural government should develop an appropriate structure for administering in-service training programs, including the appointment of supervisors in charge of these programs.

c. With the introduction of the above in-service training programs, the conditional period of initial appointment for beginning teachers should be extended from six months to one year.

II. Systematization of In-Service Training of Teachers

The great expectations of the public towards schools and instructors demand that teachers constantly train and enlighten themselves, and be aware of the importance of their professional responsibilities.

a. The division of responsibilities among the national, prefectural and municipal governments for

SE 049 343

the in-service training of teachers should be made clear, and an overall system of training should be planned in which training programs at the different level are incorporated into a whole. This would ensure the systematic and well-planned administration of in-service training programs, beginning with the school-based training provided in close connection with teachers' daily work at school.

b. In-service training programs to be undertaken at regular intervals throughout the professional career of teachers should be planned. These periodic programs will allow teachers to reflect on their own teaching experiences, acquire new professional knowledge, revitalize themselves and further improve their own capacity for classroom and other activities.

c. In order to encourage teachers to participate in training for self-enlightenment, government authorities should endeavor to strengthen financial assistance to voluntary organizations with programs for in-service teacher training. The government should also expand programs for awarding honors to teachers for outstanding accomplishments.

III. General Situation of In-Service Training for Science Teachers

The in-service science teacher training provided is either linked to curriculum revision or it is an ongoing activity aimed at updating or upgrading the knowledge and competencies of the teachers.

a. Ministry of Education, Science and Culture, Prefectural Board of Education, and Prefectural Educational Centers

The Ministry of Education, Science and Culture, prefectural boards of education, and prefectural educational centers provide opportunities for systematic in-service training for public school teachers, principals and supervisors. Some of the larger municipalities and educational study groups also hold workshops and study meetings for in-service training.

The Ministry of Education yearly holds the Central Workshops for intensive in-service training of principals, vice-principals and experienced teachers (e.g. curriculum coordinators, heads of teachers' groups teaching the same grade or the same subject in a school), who are selected and sent by every prefectural board of education. Tsukuba Annex of the National Education Center has special facilities and is equipped for the workshops, which are usually

composed of lectures of high quality and seminars related to school administration, curriculum theory, instructional method, etc.

Prefectural boards of education also make programs for in-service training and carry them out. The prefectural Education Center, which has lodging facilities, educational equipment and apparatus, and professional staff takes an important role in in-service training. Recently, the Ministry and prefectural boards of education have been concerned in providing in-service training for newly recruited and younger teachers with less than five years teaching experience as well as those being in charge of managerial affairs.

Universities and education study groups, which are voluntarily organized by school teachers, also hold workshops and study meetings.

Further, about five thousand principals, vice-principals and teachers participate each year in the above mentioned teacher's foreign programs sponsored by the Ministry of Education, Science and Culture and prefectural boards of education.

The Ministry of Education, Science and Culture gives grants to prefectural boards of education and educational study groups for in-service training.

In Japan, the predominant aim of in-service training is the improvement teachers' professional abilities. Participation in an in-service training program is not normally rewarded with a salary increase.

b. Science Education Centers

In keeping with todays social and educational trends, there are various projects and organizations being promoted. On the non-official level, there are many groups organized by science teachers.

Officially, the research and propagation of the results concerning science education are mainly conducted by Science Education Centers (or Science Education Divisions in Education Training Centers) established in each prefecture. On the national level there is the Science Education Division in the National Institute for Educational Research (NIER). The non-official groups of teachers concerned with research and studies of science education are also very often organized or guided by the staff of these institutions. Science Education Centers, representing some of the most important organizations which are

concerned with science education in Japan are explained briefly as follows.

There are many objectives of Science Education Centers but the main ones are to re-educate teachers in elementary schools, junior and senior high schools, and to carry on research about science education in general, i.e., teaching materials, techniques, educational aids and so on.

The activities of the Centers differ slightly according to each prefecture, but unlike the more or less academic studies of universities, they aim at the advancement of science education from a more practical point of view. Also, in practice, they initiate and carry out various programs, for both teachers and children.

For teachers, they provide in-service training programs and publish reference books on teaching materials and techniques. The training programs for elementary school teachers deal with such topics as teaching materials and techniques, the production and operation of educational aids, the knowledge and handling of chemicals, and how to guide children's voluntary studies or inventions. They also prepare lecture courses for improving teachers' general knowledge about science, which are usually given by university staff members.

For children, they prepare a "Science Room for Children" which aims at guiding children in knowing and experiencing a real interest in science and the pleasure of making tools and toys by themselves. They also take the initiative in encouraging and commending voluntary studies or inventions made by children and occasionally they hold exhibitions of their work.

The Centers' cars travel to remote areas carrying the necessary aids and other materials in order to ensure that suitable programs can be given.

There are annual meetings held among the Centers for exchanging and discussing the results of studies. There are about 50 Science Education Centers in Japan.

c. Hiroshima Prefectural Science Education Center

The Hiroshima Prefectural Science Education Center was established in 1962 by the Hiroshima Prefectural government. It is located at 1-12 Higashi-hon-uracho, Minami-ku, Hiroshima City, Japan. The site has an area of 2,160.3 square meters. The Center has a 3-story building which covers a floor-space of 1,584 square meters. The staff members of the center are as

follows: 1 Director, 2 Chiefs (general affairs and in-service training), 7 Researchers (Elementary Science, Physics, Chemistry, Biology, Earth Science) and 4 Clerical staff.

The functions of the Hiroshima Prefectural Science Education Center are the following:

1) To organize in-service training courses in science for teachers at elementary, (including kindergarten), and secondary levels,

2) To conduct research on science and studies in science education including the development of teaching materials of science, and diffusion of the findings among teachers,

3) To collect information on science education in Japan and abroad and to disseminate the information among the teachers, and

4) To encourage children to make a study of science in extra-curricular activities.

The modalities of survey and research tasks undertaken at the Hiroshima Prefectural Science Education Center are stated as follows:

1) Lectures and practice given in the Center or those given in the places outside the Center by use of the "Visiting Science Car"

2) Publication of the findings of surveys and research conducted by the staff and publication of reference materials for science teaching

3) Sending the staff to schools upon request for consultation with teachers

4) Giving consultation to teachers and parents on science studies

The workshops undertaken by the Hiroshima Prefectural Science Education Center in 1985 involved teachers from various school levels. The distribution of the teachers who participated in workshops at the Center is shown in the following table.

Table 1

Distribution of Teachers Who Participated Workshops at Hiroshima Prefectural Science Education Center, 1985

Schools	Number of Teachers	Number of Lectures	Number of Participants
Kindergarten	–	1	25
Elementary	10,499	89	1,595
Lower Secondary	639	50	619
Upper Secondary	785	13	345
Total	11,923	153	2,584

In the Science Education Center or Science Education Division in the Educational Training Center, there are usually 1 to 3 members to each of four divisions, namely, physics, chemistry, biology and earth science, as well as the director and an administrative staff. In a few cases, the branch of elementary science is set up separately. The staff of the Centers are composed of those researchers, who obtain university degrees, and those, who display good records while teaching at elementary, lower secondary and upper secondary schools.

In the Science Education Center, there are the study rooms, laboratories, preparation rooms, etc. for physics, chemistry, biology and earth science. And facilities such as the astronomical observatory (dome), planetarium, green house, library for teaching materials etc. are annexed to quite a number of Educational Training Centers. In addition, most of the Educational Training Centers have a big lecture hall, audio-visual research room, and library.

d. Training Course Sponsored by Research Organizations

The national government subsidizes the teachers' central and local research organizations to encourage their activities. These organizations provide teachers with frequent opportunities of in-service training under their independent programs. Central organizations of a national scale strive to educate teachers through their bulletins, and to organize experimental classes, and discussions of the results of their studies, on the occasion of their general meeting once or twice a year.